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# **Electrification Sustainability Program In South Sudan (ESP)**

**Cooperative Agreement No. AID-668-A-12-00002**

## **Quarterly Report**

**April 1 – June 30, 2013**

**NRECA International Ltd.  
July 30, 2013**

# Electrification Sustainability Program In South Sudan

## Quarterly Report, April – June 2013

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### List of Terms and Acronyms

CIS	Customer Information System
COP	Chief of Party
DCOP	Deputy Chief of Party
ECMP-3	Electronic Module Component Panel-Model 3
ESP	Electrification Sustainability Program
RSS	Republic of Southern Sudan
KAPECO	Kapoeta Electric Company
LBG	The Louis Berger Group
MECO	Maridi Electric Company
NGOs	Non-Government Organizations
NRECA	National Rural Electric Cooperative Association
SSREP	South Sudan Rural Electrification Project
SISP	Sudan Infrastructure Service Project
SUWASA	Sustainable Water and Sanitation in Africa
USAID	United States Agency for International Development
WES	Western Equatorial State
YECO	Yei Electric Cooperative

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### **Introduction**

### **Background**

Since 2005, the U.S. Government has provided ongoing infrastructure and institutional support to strengthen power sector planning throughout South Sudan, and to initiate or improve service delivery in Kapoeta, Maridi, Yei and Juba. Under the South Sudan Rural Electrification Project, USAID financed design and construction of a small generation-distribution utility in Yei that has evolved into a self-sustaining municipal electric cooperative serving approximately 1,200 consumers. Thereafter, USAID financed construction of two additional market town electrification projects in Kapoeta and Maridi; these two systems began commercial operations in April, 2011 and serve approximately 500 customers – households, commercial enterprises, public institutions and NGOs – in each community.

The challenges these small utilities face are similar but not identical. In the case of Yei, the utility commercializes enough electrical energy to cover all operating expenses and has managed to finance corrective and preventative maintenance costs for the past four years. However, the staff turnover has been high, and management still requires support to achieve long-term institutional and financial sustainability.

The two nascent utilities in Kapoeta and Maridi have not yet connected enough consumers nor do they sell enough electricity to achieve financial sustainability. The cost of generated energy is quite high, house wiring costs are still high, and there simply has not been enough time to connect enough consumers to reach a break-even point between operating costs and revenues. In both cases, there is also a need for ongoing training and mentoring for the boards of directors, the management, and employees who work at both utilities.

The Electrification Sustainability Program (ESP) has been designed to address the needs of all three utilities, as well as to undertake hydroelectric studies in Yei and Maridi (should additional funding become available), and to support Western Equatoria State (WES) and the Republic of South Sudan (RSS) to initiate planning for utility formation in Yambio.

This report covers the period April 1 to June 30, 2013. It summarizes ESP activities, challenges and accomplishments during the reporting period and identifies action items that will need to be addressed by NRECA International as well as issues that may require USAID attention.

### **ESP Objectives**

The ESP is designed to support the process of achieving long-term sustainability for the electric generation-distribution utilities in Kapoeta (KAPECO), Maridi (MECO) and Yei (YECO) and to initiate utility formation in Yambio.

The program assistance will result in generation-distribution utilities that have well-established business systems and staff that are trained to manage the business systems without external oversight; to have a technical team with the capacity to manage the day-to-day operating challenges of small, islanded, vertically integrated electric utilities, including power plant management and the operation and maintenance of the distribution system.

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A second project objective is to complete pre-feasibility studies to explore the potential for development of micro- and small-hydro generation near Maridi and Yei in order to reduce the cost of power supply to MECO and YECO. In the event that USAID decides to pursue these investments, the ESP program includes an option to review the feasibility of these investments and oversee the completion of final design of micro/small hydroelectric projects as proposed.

The third project objective is focusing on completion of an institutional and technical evaluation of the incomplete Yambio electric generation-distribution system. The ESP team will engage in a comprehensive evaluation of the engineering and construction requirements to energize the generation-distribution system, and will evaluate management options to achieve sustainable operation of the utility in collaboration with WES leadership and technical-administrative staff.

### Project Team

The NRECA project team assigned to support ESP includes the following team members, by position:

Person	ESP Duties	Tenure
Robert O. Ellinger	Chief of Party	Full Time
Janet Kauffman	Deputy Chief of Party	Full Time
Swalleh Rajab	Senior Commercial Utility Advisor	Full Time
James VanCoevering	Electrical Engineer	Part Time
Md. Tajul Islam	Customer Information System (CIS) Specialist	Contracted-Part Time
Jerry Rodgers John Padilla	Lineman Training Specialist	Contracted-Part Time
Eldon Stanley	Power Generation Specialist	Contracted-Part Time
Gregory Boudreaux	Board Development Specialist	Contracted Part Time
Kent Wick	Utility Finance Specialist	Contracted Part Time
Laban Kariuki	Utility Planning Specialist	Contracted Part Time

Additional support is being provided by the NRECA International Foundation to organize volunteer services of U.S. line workers from NRECA member cooperatives in the United States.

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NRECA International Foundation contributions are being managed by the Foundation Program Manager and Foundation Program Assistant.

### **Security Issues in Eastern and North Eastern South Sudan**

During the quarter incidents in Eastern Equatoria and Jonglei States resulted in security concerns regarding the safety of ESP traveling in the region. There were reports of gunfire in Kapoeta and several deaths along the Juba-Torit-Kapoeta road.

In recognition of the security issues we made the decision to cancel the CIS/Accounting training scheduled for KAPECO in April. While heightened security remained in effect through the early weeks in May the end of the month brought calmness to the area. Tensions diminished to the point where Swalleh Rajab was able to return to Kapoeta to continue to manage ESP duties there.

### **Activity Summary**

#### **Task I – Technical and Financial Sustainability Support for Kapoeta, Maridi and Yei Electric Utilities**

##### Customer Information System (CIS) and Accounting Workshops / Mentoring Activity

Janet Kauffman, Tajul Islam and Swalleh finalized the additions and upgrades to the CIS. Several revisions to the CIS software were introduced during this second round of training including:

- New consumer complaint register to track the number and type of complaints, action taken and the time taken to resolve the complaints
- Segregation of tasks among the users to improve efficiency and increase the reliability of data
- Sub module providing for bill collection through local banks
- Method to close a period preventing further changes to the records
- Inclusion of a programming “block” to prevent unbalanced journal entries
- Expansion of a payroll spreadsheet to include calculation of the employer’s share of SSI and proportionality allocate it to the same accounts as the charged labor.
- Introduction of a new “pre-bill” report which allows meter readings to be reviewed for “reasonableness” and help with making the decision on whether or not an investigation of the current / past readings needs to be initiated

The team began rollout of the updated version of CIS with training sessions that began in Maridi April 15. During the visits feedback from the users was incorporated into a few of the updates / revisions. Basic utility accounting was also included as part of the training sessions. Following these sessions in Maridi the team moved on to Yei with the focus being on specific accounting issues that YECO has been handling incorrectly, or not handling at all— the accounting of fuel and labor examples were the primary examples. The discussion covered accruals and payment transactions along with related transactions such as labor overhead and the fuel cost

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adjustment. Participants in the YECO training participants included the Acting Finance and Administration Manager, the Assistant Accountant, the Cashier/Assistant Accountant and the IT/Sales Associate. The General Manager, Technical Manager and Commercial Manager also sat in on many of the discussions.

Given the security concerns in Eastern Equatoria the team did not travel to Kapoeta. Janet, Tajul and Swalleh remained in Yei for a few extra days following their CIS presentations to assist YECO in organizing and coding transactions for entry into CIS. They then returned to the daily oversight and mentoring of utility staff in accounting / CIS issues at both MECO and YECO including:

### MECO

- Review of the utility's request for reimbursement for non-fuel operating expenses including the Form 1s submitted for the months of January – April 2013.
  - As part of our review we made adjustments which reduced the reimbursement request by the amounts paid by NRECA/ESP on behalf of the utility (such as vehicle and employee accident insurance). We worked with staff to properly record such expenses during the period and to deduct the amounts from the reimbursement request. The intent of these adjustments is to properly record all expenses, regardless of the entity paying, to support management/board evaluations, tariff setting and budgeting, etc.
- Identifying accounting errors and making corresponding correction entries (Rather than providing answers we task staff to do the research to determine which entries are incorrect, how to look items up in CIS to find the original entry and developing the required correction action / entry.)
- Proper accounting for the Sustainable Water and Sanitation in Africa's (SUWASA) contribution toward the construction of the three-phase line extension to the Maridi water treatment plant
- Providing oversight of utility functions and commercial operations such as the importance of accurate meter readings and the need to accurately capture the data; timely billing including the importance of prompt delivery of bills; improving collections; power theft detection; visual inspections of utility plant; disconnections and reconnections; and other commercial activities
- Analyzing the fuel inventory spreadsheet and stressing the importance of capturing power plant data on fuel delivery and usage
- Reviewing financial statements which included the proper timing of making bank entries and the correction of errors
- Reviewing the tasks for establishing and connecting new customers including the new features of CIS that will allow for a new customer search and how to print their bill or ledger along with discussing the new customer complaint register
- Examining the importance of creating and reviewing reports on a regular basis and using these reports as a tool to monitor utility operations as well serving as a basis for informed decision making



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- Working toward the expanded use of the CIS system including; billing, journal entry, cash disbursements, banking and using the new module to handle customer billing complaints / question.
- Worked with KCB bank on providing electronic access to the utility bank accounts. Obtaining bank statements electronically will allow for a timelier filing of the month close financial reports.
- Worked with staff in preparing cash flow statements which included the development of a template for future use.
- Encouraged staff to explore all options to verify that a disconnected customer's payment has been made in an effort to reconnect the customer as soon as possible. (While it is certainly preferable to have written confirmation of such payment using a bank receipt and/or statement, payment can be confirmed by other means to enable reconnection and re-establish the flow of electricity (and revenues) as quickly as possible.

### YECO

- Worked with the accountant and staff on making various adjustments to reconcile monthly statements. Helped complete a reconciliation of accounts receivables and worked on preparing the entry for the inclusion of the utility system assets onto YECO's books following the recent transfer of the assets to the co-op.
- Working with staff to replace current manual record keeping with CIS. This activity included the clearing of all "non-billing" transactions from the database and entering all 2013 transactions.
- In working with staff we found that they are missing a good amount of the data and support documentation needed for 2013 accounting records and are struggling to enter the transactions. We are slowly addressing each area of deficiency which included travel to Yei to help them work through this issue along with getting the balance sheet in balance. This work will lead to the closing of January's books and establish a methodology to complete February through June accounting records.
- Worked with staff in preparing cash flow statements which included the development of a template for future use.

### Board Training Workshop



Greg Boudreaux, Board Training and Development Specialist led the workshop held in Yei at the Episcopal Church of Sudan (ECS) Conference Center June 11-13. Eight board members from MECO and YECO along with the three utility managers attended the three day program which focused on Board Governance including: explaining the role and responsibilities of the board; defining the director duties of loyalty, obedience and care; reviewing each organization's foundational documents; discussing the role, responsibilities and powers of the chairman and other officers; defining the board relationship with the utility managers; and a review of key policy areas. (Unfortunately, due to the security issues in Eastern Equatoria State,



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members of the KAPECO Board were unable to attend the training workshop; however, a Board training session is planned for Kapoeta in July.)

Janet participated in the program by presenting information on the critical financial information and reports that need to be reviewed by the board on a regular basis – balance sheet, income statement and the cash flow statement. She reviewed key ratios to help the board gauge the utility's financial strength and stability.



Bob Ellinger participated in the program by presenting information on critical utility operations including a review of electric utility basics, generator efficiency, reliability / outages, and line loss. He reviewed key operational ratios and trends, and stressed the need for the board to support strong utility maintenance and safety programs to minimize threats to system operations.

The program evaluation for the board training workshop is included as part of this report.

### Technical Assistance and Mentoring

The ESP team continues to provide daily oversight, guidance and mentoring on a variety of activities, processes and procedures at all three utilities. As part of the mentoring process we provide ongoing guidance, review and revision of current procedures. The mentoring process builds practical, day to day business skills based upon the foundation developed through the formal training programs being held. A few of the quarterly activities included;

- Working with KAPECO and MECO staffs to analyze the current revenue and expenses including the rate schedule and calculation of the fuel cost adjustment.
- Working with the utility staffs in completing a World Bank survey focused on obtaining information to assess the capacity building needs of South Sudan in the electricity sector. The intention of the survey was to assess the capacity building needs of South Sudan in the electricity sector and the utilities were asked to provide input regarding their practical experiences.
- Working with Maridi staff on the water treatment plant line extension by finalizing material purchases.
- Working with KAPECO staff to recover from a system computer crash in May.

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- Supporting MECO in a meeting with the Sustainable Water and Sanitation in Africa (SUWASA) officials to discuss the current status of the line extension to the Maridi water treatment plant. It is anticipated the work will be completed and the plant connected to the MECO distribution system by mid-August.
- Working with the KAPECO board to fill several vacant seats. Board training for the full board is scheduled in Kapoeta for July.

### Lineman Training



John Padilla, Lineman Training Specialist led the MECO linemen in an extensive program on three-phase line construction which included pole climbing; pole framing, setting and anchor installation; construction of a transformer structure; digger derrick operation and chainsaw operation and safety. This practical, hands-on training is included as part of the observation, monitoring and mentoring provided during the extension of the three-phase line to the

Maridi water treatment plant. Line construction is now complete and the new line will be energized following transformer and meter installation

Jerry Rodgers, our ESP lineman training specialist arrived in South Sudan but soon after his arrival he became ill and returned to the United States. Jerry is still undergoing medical evaluations.



### Inventory Management, Physical Count of Material and Procurement Network

Nicholas Allen and Shahid Zaman submitted the final inventory and warehouse assessment report for the three utilities. Following a review of comments received from the ESP team modifications were made. Initially the plan was to make presentations to the board, management and staff in the May / June timeframe of this year but with the security issues in Eastern Equatoria we decided to postpone the presentation of the information until early FY 2014. During our visits to the utilities we will review the results and recommendations of the assessment specific to each utility and to initiate new policies and procedures in material handling and storage.

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The recommended template forms/documents include:

- Warehouse Methodology document template
- Warehouse weekly cleaning checklist
- Inventory issue/return form
- Warehouse stock card ledger
- Excel based inventory control and basic procurement spreadsheet

An Expression of Interest (EOI) was published in the Juba Citizen, Nairobi's Daily Nation, and Kampala's New Vision newspapers to prequalify material suppliers; ten responses were received. Nick Allen is currently reviewing the submissions and compiling the data in an Excel spreadsheet to compare and contrast the companies prior to finalizing a list of recommends to the utilities.

### Selection of New General Manager at YECO

The Board of Directors at YECO announced the hiring of Malish Lawrence Taban as the new general manager. Mr. Taban was most recently employed as the field manager for the International Rescue Committee (IRC) Torit office. Prior to his work at IRC he was employed in various capacities for the American Refugee Committee (ARC) including administrative and finance manager.

Various ESP staff members met with Mr. Taban shortly following his appointment. While he is new to the utility business, conversations indicate that he has a good understanding of business concepts and recognizes the need to implement sound business policies and procedures to operate in an efficient and effective manner. We discussed many topics of interest including the need to improve generator efficiency, the need for accurate and timely completion of weekly operating reports and the benefits ESP brings to YECO. We also provided him with copies of the presentations made during the recently completed board and management training sessions.

### JY Auditors and Management Consultants

On Sunday, April 7<sup>th</sup> Janet, Swalleh and Bob met with representatives of JY Auditors and Management Consultants (JY) to discuss the audit of Yei Electric Cooperative (YECO) including the management letter findings and recommendations. Following this meeting, and at our invitation, the two principals from JY participated in two days of the CIS/Accounting training workshop in Yei. They provided their insight on the importance of documentation of transactions, reconciliation of accounts and other critical financial and accounting activities. Following the training we discussed JY's progress on the 2012 audit and how we might work together to train the employees at all three utilities. In our effort to develop local business partners, JY has agreed to provide a proposal in response to our request for training and oversight of accounting activities at all three utilities. The proposal will include JY visiting each utility for one week each quarter to observe current accounting practices, to train the employees on the use of sound business procedures and work toward increasing the reliability, credibility and control of transactions leading to the 2013 audit.

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### Quarterly Utility Operations Report

The utility operations report provides quarterly performance monitoring and measuring indicators established to contribute to the understanding of good business practices.

Key performance indicators for the First and Second Quarters (January – March & April - June)

Key Performance Indicators	KAPECO		MECO		YECO	
	1 <sup>st</sup> Quarter	2 <sup>nd</sup> Quarter	1 <sup>st</sup> Quarter	2 <sup>nd</sup> Quarter	1 <sup>st</sup> Quarter	2 <sup>nd</sup> Quarter
Services in Place	414	450	501	524	1,107	1,134
New Connections	24	36	21	23	6	27
Percentage Increase in Connections (Quarter)	6.3%	8.7%	4.4%	4.6%	0.5%	2.4%
System Peak (kW) Y-T-D	117	117	94	96	576	576
Generator Efficiency (kWh/Liter)	2.82	2.57*	2.75	2.68	2.9	3.47
Percentage Increase/Decrease in Generator Efficiency-Quarter	+4.8%	-8.9%	+5.0%	-2.5%	+3.2%	+19.7%
Average Run Hours per Day	12.9	12.9	15.6	15.6	17	17
Outages (Quarter)	4	0	1	4	1	7
Outage Hours per Consumer Year to Date	6.6**	6.6**	0.125	0.3815	3.39	3.395

Key issues and activities at the utilities:

#### KAPECO

- \* The generator efficiency for KAPECO was affected by the reduction in kWh sales due to the security situation and the closure of many shops in and around Kapoeta. Generator efficiency during the early weeks in July indicates a slow return to more normal levels.
- \*\* Major increase in outage hours per consumer due to SPLA truck breaking a pole with the resulting outage lasting seven hours.
- Completed general line maintenance including the repair of loose guys wires in the substation and the renumbering of several poles on the system
- Generator # 2 developed starting problems – performed diagnostics under the guidance of Bud Stanley – ESP generation specialist.

#### MECO

- Completed scheduled service on generators #1 & #2 (oil, fuel & oil filters changes and air filter cleaned).

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- Completed construction of three-phase distribution line to Maridi water treatment plant.

### YECCO

- Hired new general manager
- Completed overhaul on generator #2 and planning overhaul for generator #3
- Completing line extensions and adding new customers following the purchase of meters and poles

### Task II – Yei, Maridi Hybrid Micro-Hydro Capacity

We are making initial inquiries on the options available to introduction renewables into the wholesale power generation mix at all three utilities. While Task II focuses on the evaluation of micro-hydro options available at Yei and Maridi, the proposal being developed will focus on the current uses of electricity in the agricultural sector and how expanded electricity use will improve the commercial development of agriculture within South Sudan.

The focus of the evaluation will be to reduce the cost of wholesale power in an effort to improve growth in the agricultural sector in and around Kapoeta, Maridi and Yei along with contributing to the long-term sustainability of the utilities. We believe it is extremely important to evaluate other renewable energy options at all three locations.

### Task III - Utility Evaluation and Development Support for Yambio

Activities to evaluate the options to develop an electric utility in Yambio have begun to move forward. During the past quarter we renewed communications with the electric utility director and the office of the Minister of Physical Infrastructure and Public Utilities in an effort to gain a better understanding of the current status of the utility project contracts including plant ownership and operation status. While significant work has been completed in project design and construction the generation and distribution system has not been placed in commercial operation and the components of the system are falling into disrepair. We expect to meet with concerned officials in July and begin system evaluation in August/September.

### Other ESP Support Activities

#### Reimbursement Payments to Utilities

Payments to Kapoeta and Maridi Utilities for reimbursement of non-fuel operating expenses were made following a thorough review of the financial and accounting records including monthly Form 1s. Payments for this quarter were as follows.

Utility	April	May	June	Quarter Total	FY-T-D
KAPECO	0	0	0	0	57,700
MECO	22,710	0	9,500	32,210	86,710
				32,210	144,410



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### Early Departure of Deputy Chief of Party

Janet Kauffman accepted a one year assignment to the role of Deputy Chief of Party for the Electrification Sustainability Program in South Sudan (ESP) in August, 2012. Janet recently informed us that her husband, who has a degenerative vision condition, is scheduled to undergo corrective surgery on July 16<sup>th</sup> followed by several months of recovery. Due to the severity of his condition, Janet believes her presence will be essential to help support his recovery.

As mentioned, the original ESP work plan proposed that Janet would serve in the position of DCOP for a one year period through August 12, 2013. Given the severity of her husband's medical condition, she departed South Sudan in July.

With Janet's early departure many of her duties will be transferred to Swalleh Rajab, currently serving as Senior Commercial Specialist in support of ESP. We have recently initiated the process to hire a project accountant to continue the mentoring process of utility employees in financial management, accounting and customer information system (CIS) functions. CIS support functions will continue to be provided by Nazrul Islam CIS Specialist along with Sam West, NRECA financial specialist. And finally, to ensure that the transition in duties and responsibilities goes smoothly, Janet has agreed to work part-time if support of a specific nature if needed. While these changes are necessitated by the unforeseen medical condition of Janet's husband, they will not result in an increase of project cost to USAID.

### Hiring of Project Accountant / Administrative Assistant

To continue the progress made by both Janet and Swalleh with the three utilities in CIS and utility accounting/commercial operations, we will be adding a project accountant / administrative assistant to the ESP team. Twenty-three applications have been received since the publication of the search announcement on June 24. We hope to have the new person hired in August and their initial work will focus on becoming familiar with utility accounting and learning the CIS under the tutelage of Swalleh. Janet will work part-time from home to in part assist in orientation for the project accountant to review accounting practice and required changes necessary at the three utilities.

### Financial Evaluation of KAPECO and MECO

A review of the accounting procedures and results presented over the past many months has revealed that, MECO in particular and to a lesser extent, KAPECO are still struggling to correctly categorize expenditures in the appropriate accounting categories, and to prepare accurate financial reports. In an effort to evaluate how to address this challenge, the NRECA/ESP project team, assisted by Kent Wick, completed an analysis of KAPECO and MECO financial reports for 2012-2013.

This analysis has highlighted two issues of immediate concern. Firstly, the review has confirmed that there remain challenges to accurately record transactions in the general ledger module of the CIS and to employ the CIS reporting module to prepare relevant and accurate monthly financial reports. Moreover, the tariff structure that was designed three years ago needs to be revised to allow a higher level of cost recovery, given the dramatic increase in fuel cost that occurred in 2012 between the completion of Sudan Infrastructure Services Project (SISP) Task Order 3 and

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the beginning of ESP in August, 2013. The tariffs applied at present need to be adjusted upwards to allow for higher cost recovery.

To address these high priority issues we plan to make two immediate changes in ESP: 1) providing additional support to KAPECO and MECO by bringing in additional accounting resources to work with the bookkeepers in each utility on a daily basis to provide more intensive, on-the-job training in general ledger management and financial reporting; and, 2) illustrate the need for tariff increases to each of the boards at MECO and KAPECO, and to design a program to increase revenues as needed over a six month period to account for the revenue shortfalls that have occurred due to the extraordinary fuel price increases that occurred in 2012 and persist today. This exercise will also result in a modification of the fuel adjustment formula that has been employed.

### Meeting with USAID Officials

Bob met with Nataliya Holl, ESP Agreement Officer, George Wagwa – ESP Agreement Officer Representative (AOR) and Richard Nyarsuk – Infrastructure Engineer (Alternate ESP AOR) on May 20<sup>th</sup>. A short synopsis of the ESP program including a program update was provided. Challenges to the successful completion of the project were also discussed. It was agreed that Bob will meet with USAID officials on a regular basis.

### Meeting with USAID FARM Project Chief of Party

On April 8<sup>th</sup>, Bob met with David Hughes, Chief of Party for the USAID sponsored FARM Project in South Sudan. The discussion focused on project activity and the possibility of joint opportunities where both FARM and ESP programs could work together to improve the development of food production, storage and processing leading to improvements in the South Sudan agribusiness industry. As part of this effort NRECA International is developing a survey to collect data on the involvement of current electric utility customers in the agricultural sector.

### Environmental Compliance and Monitoring

As a follow-up to his attendance at the USAID Life of Project Environmental Compliance and Environmentally Sound Design and Management workshop, Swalleh began providing instruction on how to meet compliance and reporting requirements to the staffs of all three utilities. As part of this instruction he provided a checklist to address critical issues of concern and track monitoring activity.

### Meeting with Ministry of Electricity and Dams

Laban and Bob visited Samuel Yousel Taban of the Ministry of Electricity and Dams in mid-April to discuss the meetings with State Ministers in Torit and Yambio regarding the transfer of electric plant assets to the States while assigning operation and maintenance of the systems to KAPECO and MECO. We also discussed activity in the Electric Power Sector within South Sudan including the current status of the electric utility assets in Yambio.

### Transfer of Utility Plant Assets

At the request of USAID, ESP staff continues to work on finalizing the transfer of utility plant assets from the South Sudan Rural Electrification Project (SSREP) and the Sudan Infrastructure Project (SISP), two projects in which NRECA actively participated.



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SSREP - YECO – We received approval from USAID for the NRECA asset disposition plan under Cooperative Agreement No. 623-A-00-05-00310. The documents completing the transfer were signed in May.

SISP – KAPECO and MECO – We are working with representatives of The Louis Berger Group (LBG) to finalize the transfer of assets built under SISP to the Eastern and Western Equatoria State governments with the assets being operated and maintained by KAPECO and MECO under memorandums of understanding (MOUs) between EES / WES and the utilities.

Laban Kariuki, ESP Utility Planning Specialist, developed the MOU to be incorporated in the transfer of assets from USAID to the utilities under SISP. The draft was submitted to USAID, NRECA staff and LBG for review / comment. The comments and revisions were incorporated into the final draft presented to the State Ministers and utilities in April. The meetings in April include discussions on final agreement for the continued operation and maintenance of the distribution plant by KAPECO and MECO for the electrification of Kapoeta and Maridi.

KAPECO – A meeting was held with the Honorable Benaiah Benjamin Kitara, State Minister of Housing and Public Utilities for Eastern Equatoria and concerned officials on Friday, April 19<sup>th</sup> in Torit. Following a brief introduction a presentation was made highlighting NRECA International's participation in rural electrification projects in South Sudan and internationally. The presentation then moved to the transfer documents - Asset Transfer Certificate and Memorandum of Understanding (MOU) – which were thoroughly discussed. Minor revisions were made to the MOU with the final versions of both documents presented to Ministry's legal counsel for review. Ministry officials visited Kapoeta in June to examine the assets to be transferred with the visiting team being comprised of representatives from the State Ministry for Housing and Public Utilities-Eastern Equatoria including Mr. Leon Kale - Director for Power Supply and Mr. Dominic Edward - Legal Advisor. We anticipate that the agreements to transfer the assets will be finalized and signed in in the near future.

MECO - A meeting was held with the Honorable Clement Juma Mbugoniwia, State Minister of Physical Infrastructure and Public Utilities for Western Equatoria and concerned officials on Wednesday, April 24<sup>th</sup> in Yambio. Following a brief introduction a presentation was made highlighting NRECA International's participation in rural electrification projects in South Sudan and internationally. The presentation then moved to the transfer documents - Asset Transfer Certificate and Memorandum of Understanding (MOU) – which were thoroughly discussed. Minor revisions were made to the MOU with the final versions of both documents submitted to the Director General for final review. We expect Ministry officials to visit Maridi in near future to examine the assets to be transferred with the formal agreement signing to follow.

### [South Sudan Energy Sector Workshop in Juba](#)

NRECA Senior Vice President Dan Waddle, Laban and Bob attended a workshop jointly sponsored by the Ministry of Electricity and Dams and the Norwegian Water Resources and Energy Directorate in Juba. Dan participated in the program by presenting information on NRECA International's contribution to the advancement of rural electrification in South Sudan highlighting our operational experience with the utilities in Kapoeta, Maridi and Yei. The workshop was very informative and well attended by government and industry officials.

# **Electrification Sustainability Program In South Sudan**

## **Quarterly Report, April – June 2013**

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### Local Training Partners

During the initial year of ESP training program presentations a concern has come to the forefront – there is a question on the trainees’ full comprehension and understanding of the English language. In an effort to improve the employees’ knowledge and understanding of the English language we met with Patricia Wick of the Chaima Institute, a training center sponsored by the Episcopal Church in Maridi. Preliminary plans are to offer beginner and immediate English courses to MECO staff beginning in August. We anticipate such a course will help employees better comprehend the training being presented by program specialists.

We plan to build on the success of the Maridi model to establish programs in Kapoeta and Yei using local training professionals / organizations and explore expanding the program to include computer training and bookkeeping / accounting.

### Potential Investor in Maridi Power Supply

We have held preliminary discussions with Richard Morgan of Equatorial Investments LLC to explore a joint agricultural development project. The Equatorial Investments agricultural sector project business plan focuses on the purchase of maize from local producers and adding value by drying it, storing it and milling the grain into flour for sale locally throughout the year. The second phase of the project will seek to certify maize seed and grow high value vegetables. Mr. Morgan has spent several months gathering data and assessing various potential sites for development and Maridi County was selected as the best site for the project based on soil, climate, available water and a favorable security environment. The project sponsor is from the United States with connections to the Hearst Corporation and a twenty year association with development projects in Sudan.

A possible joint effort to explore the development of a mini-hydro facility at the dam serving the Maridi water treatment plant is being discussed. The electricity generated will feed into the MECO distribution system reducing the cost of power generation for all customers including the Equatoria Investment facility.

### Project Employee and Specialists Travel In and Out of Country

Tajul Islam the ESP CIS / Computer Specialist from Bangladesh visited South Sudan, April 8 - May 12.

Laban Kariuki, Utility Planning Specialist from Kenya visited South Sudan April 16 - 26.

John Padilla, Lineman Training Specialist from the US visited South Sudan June 3-21.

Greg Boudreaux, Board Training Specialist from the US visited South Sudan June 7-16.

# **Electrification Sustainability Program In South Sudan**

## **Quarterly Report, April – June 2013**

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### **Key Issues and Challenges**

#### YECO Staff Turnover

Janet visited YECO early in May to work with staff to gather the year-end information necessary to evaluate and monitor utility financial performance. Unfortunately, YECO is currently using the CIS for billing purposes only; not making use of the modules that provide reports regarding annual statistics such as KWH produced and sold, revenue and expenses (including fuel expense) as is done at KAPECO and MECO.

We believe that part of the problem with the use of CIS at YECO has been the change in personnel combined with their reluctance to use the software along with knowing and understanding generally accepted utility accounting and commercial operation business practices. There is a reluctance to accept CIS and no desire to produce financial statements and reports. Initially staff reluctance was fueled by a lack of support by upper management and the board. Since everyone in the office staff is new the ESP team has made a concerted effort to be onsite and hold many training sessions to assist staff in becoming familiar with the new process and procedures.

Interestingly enough we have noticed that since the hiring of a general manager in May and the board and management training workshops held over the past several months, the employee's interest and urgency level has been increased and there seems to be a desire to understand the process and complete assigned tasks. While interest has increased progress remains slow.

#### Networking of Computers

We are currently evaluating the computer hardware systems at each utility. Unfortunately the current hardware limits use of the computer system to only one operator. This review will examine the benefits of networking the computers to improve access, time management and employee efficiency. We will also use this effort to identify possible computer technology partners for future training and business operations opportunities.

### **Major Events – Upcoming Activity**

- Presentation of the Financial Evaluation and NRECA recommendations to the Boards of both KAPECO and MECO
- Signing of KAPECO and MECO asset transfer agreements and MOUs
- Technical and Institutional evaluation of the Yambio electric utility plant
- Continuation of discussions with computer technology professionals to review current hardware configuration at the three utilities and establish an ongoing support and training agreement.
- Continuation of developing a local training partner network
- Board training for KAPECO board in Kapoeta
- Departure of Deputy Chief of Party
- Completion of FY 2014 Work Plan

# Electrification Sustainability Program In South Sudan

## Quarterly Report, April – June 2013

### Financial

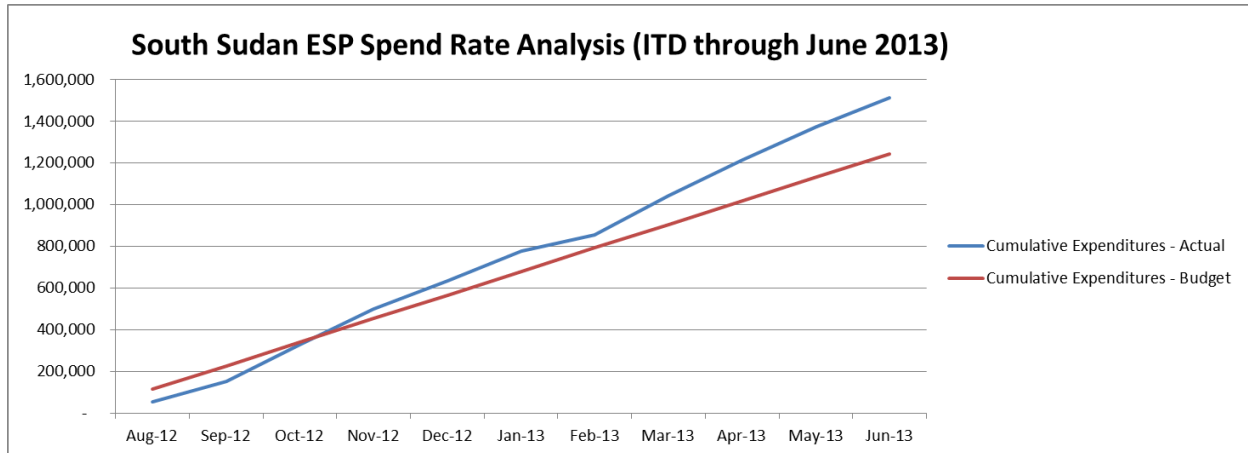
<b>Financial Status</b> (as of end of reporting period - 06-30-2013)	
a. Project Start Date:	8/08/2012
b. Project Completion Date:	8/07/2015
c. Estimated Life of Activity (months):	36
d. Expired Life of Activity (months):	11
e. Total Estimated Cost:	3,870,000
f. Unilateral Obligation	2,194,000
g. Bilateral Sub-obligation	0
h. Total Obligation:	2,194,000
i. Mortgage (e-h):	1,676,000
j. Expenditures:	1,513,239
k. Pipeline as of end of reporting period (h-j):	680,761
l. Historical Monthly Burn Rate (j/d):	137,567
m. Average Monthly Burn Rate (Last Quarter):	156,373
n. Length of Pipeline in Months (k/m):	4.35
o. Cumulative Expenditures as % of Obligations:	68.96%

<b>Spend Rate Compared to Budget (FY 2013)</b>								
Month	Actual	Budget	Month	Actual	Budget	Month	Actual	Budget
August	51,770	113,119	December	134,090	113,119	April	172,024	113,119
September	98,446	113,119	January	142,991	113,119	May	159,629	113,119
October	178,520	113,119	February	79,987	113,119	June	137,467	113,119
November	169,990	113,119	March	188,326	113,119	Total	1,513,239	1,244,309

# Electrification Sustainability Program In South Sudan

## Quarterly Report, April – June 2013

### Spend Rate Analysis Graph



Breakdown in Project Costs by Specific Element	
Personnel	\$342,475
Fringe Benefits	\$173,439
Travel	\$112,566
Equipment	\$62,676
Supplies	\$3,477
Contractual	\$141,201
Other	\$105,371
Non-Fuel operating Costs	\$163,184
Indirect Charges	\$408,850
<b>Total</b>	<b>\$1,513,239</b>

While project expenses have outpaced the budget such a spending pattern could be expected with frontend expenses being loaded with project startup costs including the purchase of a project vehicle and the influx of training programs in the early months of ESP. The major cost centers which are above budget include; contractual, travel and the reimbursement of non-fuel operating expenses. All three of these areas will experience minimal activity over the final quarter which will contribute to the downward trend of expenses experienced over the past three months.

# Electrification Sustainability Program In South Sudan

## Quarterly Report, April – June 2013

### Process Indicators

The table below shows the process indicators that will be used to track progress in the program as compared to initial benchmarks for all activities and tasks. The process indicators for the ESP program are drawn from the program workplan, in which completion milestones have been set for each Task within the three Activities of the program. More details on each Activity and Task are available in the ESP program workplan.

Workplan No.	Activities and Tasks	Milestones	Completion (Planned)	Completion (Actual)
1.0	Yei, Maridi, Kapoeta Technical & Financial Sustainability Support			
1.1	Benchmark diagnostics	Diagnostics completed.	31-Oct-2012	26-Oct-2013
1.2	Board training courses	Board members complete training courses.	18-Jan-2013	Feb-2013
1.3	Board peer-to-peer sessions	Board members participate in peer-to-peer sessions.	23-Jan-2013	13-June-2013
1.4	Leadership Training	Utility managers and key staff complete training courses.	22-Mar-2012	21-Mar-2013
1.5	GM Training	Utility managers and key staff complete training courses.	29-Mar-2013	21-Mar-2013
1.6	Annual GM retreat	Utility managers participate in peer-to-peer sessions.	03-April-2013	Delayed
1.7	Human resource management training	Utility managers and key staff complete training courses.	24-May-2013	21-Mar-2013
1.8	Accounting and Financial Control Training	Utility financial and commercial staffs complete training courses.	28-June-2013	Delayed
1.9	Meter reading and data management training	Utility financial and commercial staffs complete training courses.	8-Mar-2013	Delayed
1.10	Commercial management training	Utility financial and commercial staffs complete training courses.	30-Nov-2013	Delayed
1.11	Line worker safety training	Line workers complete training courses.	12-July-2013	21-June-2013
1.12	Power Generation Training	Power plant O&M training for plant operators and key staff	21-Dec-2012	20-Dec-2012
2.0	Yei, Maridi Hybrid Micro-Hydro Capacity			
2.1	Hydrology data and community coordination	Review completed.	TBD	
2.2	Civil engineering design	Design work completed	TBD	
2.3	Generation and substation design	Design work completed	TBD	
2.4	Power line interconnection design	Design work completed	TBD	
2.5	Cost estimates	RFQ completed	TBD	
2.6	Financial model	Modelling completed	TBD	
2.7	Report delivered	Design report delivered.	TBD	
3.0	WES & Yambio Electric Utility Assistance			
3.1	Planning workshop with WES Government	WES participates in workshop.	13-Mar-2013	Delayed
3.2	Diagnostic fieldwork, initial recommendations	Fieldwork completed, initial recommendations delivered.	3-April-2013	Delayed
3.3	Diagnostic report prepared	Diagnostic report prepared.	07-May-2013	Delayed
3.4	Diagnostic report delivered	Diagnostic report delivered.	08-May-2013	Delayed

## Electrification Sustainability Program In South Sudan

### Quarterly Report, April – June 2013

Workplan No.	Activities and Tasks	Milestones	Completion (Planned)	Completion (Actual)
3.5	Implementation of Follow-on Training Activity	Follow-on training activity implemented (TBD)	TBD	Delayed
4.0	Program Management, Monitoring, Evaluation and Reporting			
4.1	ESP team mobilization	Consultants notified, PSA signed, and Team mobilized to SS	28-Aug-2012	10-Sept-2012
4.2	Workplan and MEP submitted	Annual workplan and MEP submitted to USAID	5-Sept-2012	05-Sept-2012
4.3	Workplan and MEP revised	Revised workplan and MEP delivered.	28-Sept-2012	17-Oct-2012
4.4	Quarterly Progress Reports	Quarterly progress reports delivered within 30 days of end of quarter.	Jan, April and July 2013	31-Jan-2013 30-April-2013 31-July-2013 31-Dec-2102
4.5	Quarterly Financial Reports	Quarterly financial reports delivered within 45 days of end of quarter.	Feb, May and August 2013	30-Jan-2013 29-July-2013
4.6	Year 2 - Workplan and MEP submitted	Year 2 - Workplan and MEP submitted to USAID	30-Aug-2013	



# Electrification Sustainability Program In South Sudan

## Quarterly Report, April – June 2013

### Output Indicators

Indicator No.	Indicator Name	Indicator Definition, Description, Data Source, and Discussion	Baseline (2012)	2013 T - A		Program Actuals
Output 1.0	Board training.	<p>Definition: Number of people receiving USG supported training in roles and responsibilities of electric utility board members.</p> <p style="text-align: right;">KAPECO MECO YECO</p> <p>Description: Total number of participants in electric utility board training sessions, disaggregated by gender and utility.</p> <p>Data Source: NRECA project reports.</p> <p>Discussion: This is an ESP indicator that closely resembles the USAID standard indicator for management training (see Output 2.0 indicator below). While this indicator is disaggregated by gender, the target is not disaggregated because the program has no influence over the gender of board members selected or elected in the three communities.</p>	<p>0 0 0</p>	<p>M-F 5-1 6-1 6-1</p>	<p>M-F 1-0 6-1 6-0</p>	<p>M-F 1-0 6-1 <u>6-0</u> 13-1</p>
Output 2.0	Management training.	<p>Definition: Number of people receiving USG supported training in energy related business management systems.</p> <p style="text-align: right;">KAPECO MECO YECO</p> <p>Description: Total number of participants in utility management basic training, and administrative training, disaggregated by gender.</p> <p>Data Source: NRECA project reports.</p> <p>Discussion: This is a USAID standard indicator. While this indicator and reporting is disaggregated by gender, the target is not disaggregated because the program has little influence over selection of utility personnel in the three utilities, and therefore should not set a target as to their gender. Note that the management training and the administrative and financial training envisioned in the program have been combined into this one indicator.</p>	<p>0 0 0</p>	<p>M-F 3-3 5-0 5-1</p>	<p>M-F 4-2 4-0 3-2</p>	<p>M-F 4-2 4-0 <u>3-2</u> 11-4</p>

## Electrification Sustainability Program In South Sudan

### Quarterly Report, April – June 2013

Indicator No.	Indicator Name	Indicator Definition, Description, Data Source, and Discussion	Baseline (2012)	2013 T - A		Program Actuals
Output 3.0	Electric lineworker training.	Definition: Number of people receiving USG supported training in electric line and power plant generation work.	0	M-F	M-F	M-F
		KAPECO	0	10-1	10-0	10-0
		MECO	0	10-1	10-1	10-1
		YECO	0	14-0	17-0	<u>17-0</u> 37-1
		Description: Total number of participants in lineworker and power plant generation training, disaggregated by gender.				
		Data Source: NRECA project reports.				
		Discussion: This is an ESP indicator that closely resembles the USAID standard indicator for management training (see Output 2.0 indicator above). While this indicator and reporting is disaggregated by gender, the target is not disaggregated because the program has little influence over selection of utility personnel in the three utilities, and therefore should not set a target as to their gender.				

# Electrification Sustainability Program In South Sudan

## Quarterly Report, April – June 2013

### Outcome Indicators

(Indicators No. 2-5 are based on year end 2012 figures-3 month lag)

Indicator No.	Indicator Name	Indicator Definition, Description, Data Source, and Discussion	Baseline (2012)	2013 T - A		Program Actual FY 2013
Outcome 1.0	Improved electric service.	<p>Definition: Number of beneficiaries receiving improved infrastructure services due to USG assistance.</p> <p style="text-align: right;">KAPECO MECO YECO Yambio</p> <p>7,400 1,350 1,550 4,400 0</p> <p>Description: Total number of customers connected to the three primary beneficiary utilities (MECO, KAPECO and YECO), and to a potential new rural utility in Yambio, multiplied by four. This multiplier is used, rather than a higher number of average household size in South Sudan utilized in other analyses, because some of the electric service customers will be small commercial establishments rather than households. No attempt is made to count beneficiaries such as users of public lighting, beneficiaries of public institutions and NGOs, etc. The indicator therefore will provide a conservative estimate of beneficiaries of improved utility management and operations.</p> <p>Baseline and targets determined following utility diagnostics (Nov-2012)</p> <p>Data Source: NRECA project reports and utility records.</p> <p>Discussion: This is a USAID standard indicator. In the ESP, this indicator is not disaggregated by gender because it will not be directly measured; i.e. the number of people with electric service will not be directly counted in each customer (household, commercial establishment, public institutions, etc.); therefore any gender disaggregation would be an estimate only.</p>		300	508	508
				90	240	240
				100	136	136
				110	132	132
						0
Indicator No.	Indicator Name	Indicator Definition, Description, Data Source, and Discussion	Baseline (2012)	2013 T - A		Program Actual FY '13
Outcome 2.0	Utility cost recovery.	<p>Definition: Cost recovery index-(Indicators No. 2-5 are based on year end 2012 figures-3 month lag)</p> <p style="text-align: right;">KAPECO MECO YECO</p> <p>85% 75% 66%</p> <p>Description: This standard index will measure the commercial cycle efficacy of each utility (MECO, KAPECO and YECO) as the product of collection rates and losses for each utility. A utility with 95% collection rates and 10% losses would have a cost recovery index of 0.95 * 0.90 or 0.855.</p> <p>Baseline and targets to be set following utility diagnostics (Nov- 2012)</p> <p>Data Source: NRECA project reports and utility records.</p> <p>Discussion: This is not a USAID standard indicator. Disaggregation by utility</p>		86.5	93.3	93.3%
				77%	81.3	81.3%
				72%	86	86%

# Electrification Sustainability Program In South Sudan

## Quarterly Report, April – June 2013

Indicator No.	Indicator Name	Indicator Definition, Description, Data Source, and Discussion	Baseline (2012)	2013 T - A		Program Actual FY 2013
Outcome 3.0	Utility expenditure management.	<p>Definition: O&amp;M expenses per kWh sold, normalized for fuel costs. (Indicators No. 2-5 are based on year end 2012 figures-3 month lag)</p> <p style="text-align: right;">KAPECO MECO YECO</p> <p>Description: The ratio of operation and maintenance expenses per period to kilowatt hours sold in the same period. This ratio will be normalized for variation in fuel costs to ensure that the indicator tracks utility management behavior and not variations in the fuel markets.</p> <p>Baseline and targets to be set following utility diagnostics.</p> <p>Data Source: NRECA project reports and utility records.</p> <p>Discussion: This is not a USAID standard indicator. Disaggregation by utility.</p>	<p>2.1 SSP 1.9 SSP 2.5 SSP</p>	2.05 1.85 2.4	1.72 2.02 0.68	1.72 2.02 0.68
Outcome 4.0	Utility operating margins.	<p>Definition: Operating margins per kWh generated. (Indicators No. 2-5 are based on year end 2012 figures-3 month lag)</p> <p style="text-align: right;">KAPECO MECO YECO</p> <p>Description: The operating margins for each of the three utilities (MECO, KAPECO and YECO) will be tracked and reported. It should be noted that this indicator is <u>not</u> a proxy measure of effectiveness of the ESP program, since fuel costs and other variables in the economic context of each service territory will influence this metric, but it will still be a useful data set for USAID in considering the implications of its investments in utility start-up in South Sudan.</p> <p>Baseline and targets to be set following utility diagnostics.</p> <p>Data Source: NRECA project reports and utility records.</p> <p>Discussion: This is not a USAID standard indicator. Disaggregation by utility.</p>	<p>-1.1 SSP -1.3 SSP -1.5 SSP</p>	-0.88 -1.04 -1.2	-0.20 -0.46 .192	-0.37 -1.61 .192

## Electrification Sustainability Program In South Sudan

### Quarterly Report, April – June 2013

Indicator No.	Indicator Name	Indicator Definition, Description, Data Source, and Discussion	Baseline (2012)	2013 T - A		Program Actual FY 2013
Outcome 5.0	Mgmt. Staff Turnover Percentage	<p>Definition: Management Staff Turnover Percentage (Indicators No. 2-5 are based on year end 2012 figures-3 month lag)</p> <p style="text-align: right;">KAPECO MECO YECO</p> <p>Description: A high turnover of key management staff may be an indicator of internal strife and disruption within an organization. While there is little information on utility standards in this area comparisons can be made from project start (possibly a year or two prior) to end dates.</p> <p>Baseline and targets to be set following utility diagnostics. Data Source: NRECA project reports and utility records. Discussion: This is not a USAID standard indicator. Disaggregation by utility.</p>	<p>24% 0 % 100%</p>	12%	24%	24%
				0%	0%	0%
				50%	50%	50%

### Impact Indicators

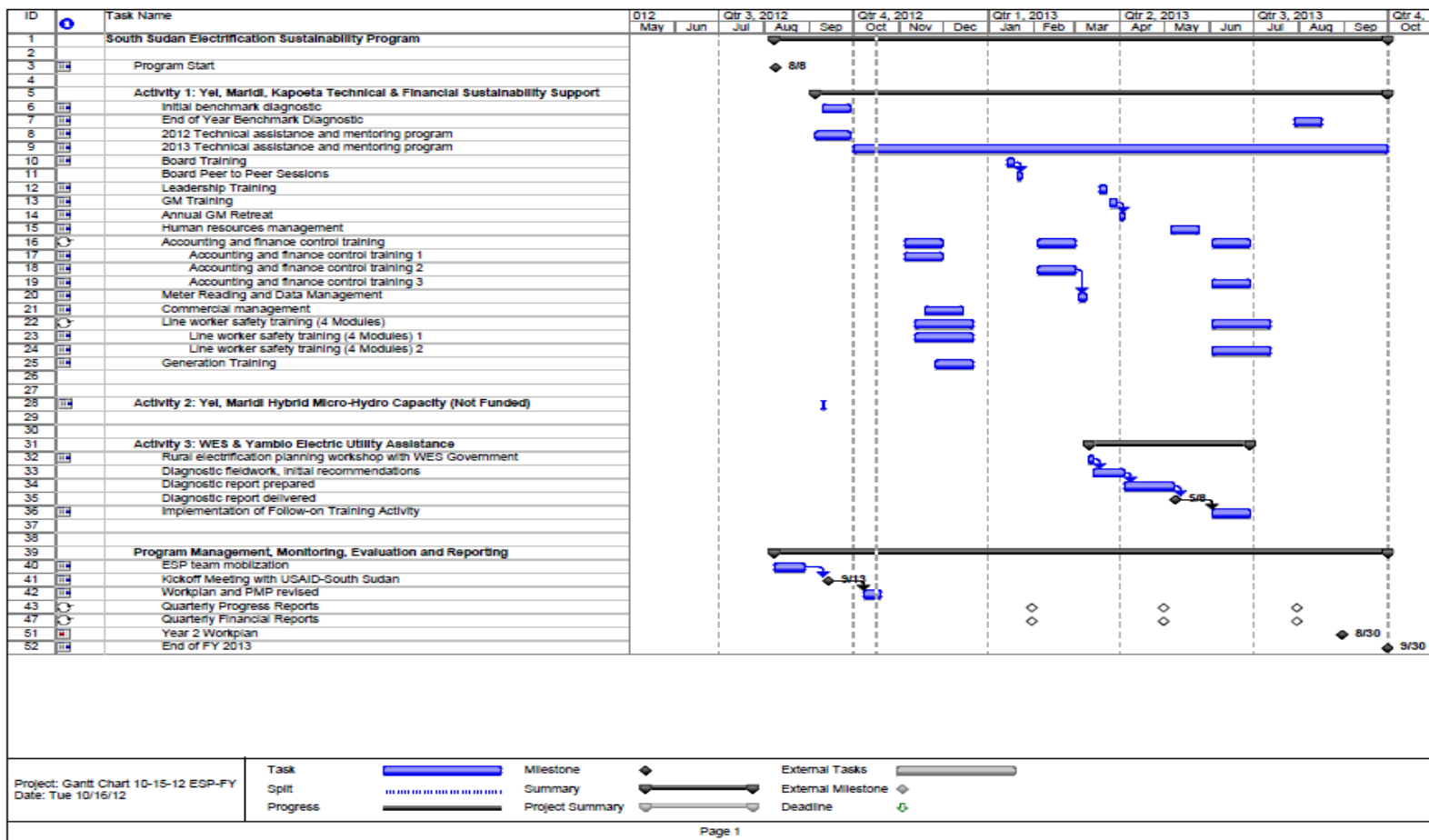
The ESP program will be focused on improving utility management and operations, and therefore will not track high-level impact indicators. However, while there is no direct correlation with project training activities to the indicator, an attempt will be made to measure the number of new businesses or expanded businesses connecting to the distribution grid during the project; possibly as a percentage of businesses receiving electric service from the distribution grid.

Indicator No.	Indicator Name	Indicator Definition, Description, Data Source, and Discussion	Baseline (2012)	2013 T - A		Program Actual FY'13
Impact 1.0	Number of new / expanded business connections.	<p>Definition: Number of new or expanded business connections (Impact Indicator is current through Quarterly Report period)</p> <p style="text-align: right;">KAPECO MECO YECO Yambio</p> <p>Description: While there is no direct correlation between the project training and mentoring activities and the number of new businesses or expanding businesses receiving electric service, an attempt will be made to measure the number of new or expanded businesses connecting to the distribution grid during the project. Baseline and targets to be set following utility diagnostics. Data Source: NRECA project reports and utility records. Discussion: This is not a USAID standard indicator. Disaggregation by utility.</p>	<p>238 237 740 0</p>	16	66	66
				16	57	57
				19	45	45
						0

# Electrification Sustainability Program In South Sudan

## Quarterly Report, April – June 2013

### ESP Project Gantt Chart



# Electrification Sustainability Program In South Sudan

## Quarterly Report, April – June 2013

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### Board Training Workshop Evaluation

#### BOARD TRAINING PROGRAM EVALUATION

##### SUMMARY OF RESPONSES

June 11-13, 2013 Yei, Sudan

1. On a scale of from 1 (not **valuable** at all) to 5 (very valuable), was this program of value to you? 1-2-3-4-5

Comments: \_\_\_\_\_ **AVERAGE**

**4.8**\_\_\_\_\_

2. On a scale of from 1 (not **relevant**) to 5 (very relevant), was this program relevant to your needs? 1-2-3-4 5

Comments: \_\_\_\_\_ **AVERAGE**

**5**\_\_\_\_\_

3. What was **MOST VALUABLE to you**, and why? \_\_\_\_\_

*ROLES OF EFFECTIVE BOARDS; DIRECTOR DUTIES (mentioned twice); BOARD AND GM RESPONSIBILITIES (mentioned by 4 directors); "LOGIC DUTIES (duty of care) of DIRECTORS; "TO DO" LIST FOR BOARDS; FINANCIAL STATEMENTS (mentioned by 6)*

4. What was **LEAST VALUABLE to you**, and why? *FOOD NOT GOOD* (mentioned by 2 directors)

5. This program could have been **improved by**. *BEING LONGER (2 directors); MORE ON FINANCE AND ACCT (mentioned by several) ; PRESENTATION ON FORM 1; MORE ON PLANNING; (X 2); MORE PRACTICE EXERCISES; PROCUREMENT OF FINANCIAL POLICIES*\_\_\_\_\_

6. What topics would you like to see addressed in **future programs**? *MORE EXERCISES; FORM 1; F&A; SAMPLE STRATEGIC PLAN, SAMPLE BUSINESS PLAN; STRATEGIC PLANNING*

7. How else could **NRECA help you**? *DEVELOP POLICIES; VISIT OTHER UTILITIES; MOVE TRAINING TO OTHER UTILITIES; VISIT OTHER UTILITIES; MORE TRAINING; INCREASE CAPACITY BUILDING WITH STAFF TRAINING PLAN, SAMPLE BUSINESS PLAN;*
-



# **Electrification Sustainability Program In South Sudan**

## **Quarterly Report, April – June 2013**

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### **Requests for Expression of Interest Advertisement in Juba and Nairobi Newspapers**

#### **Company Profiles**

The companies – Kapoeta Electric Company Limited (KAPECO), Maridi Electric Company Limited (MECO) and Yei Electric Cooperative (YECO) (known herein as the “utilities”) – operate three, independent electricity generation and distribution networks in the Republic of South Sudan towns of Kapoeta, Maridi and Yei, respectively. YECO was formed in 2010, while MECO and KAPECO were formed in 2011. YECO serves approximately 1,100 customers, while KAPECO and MECO serve roughly 500 each. All utilities are actively looking to expand. The utilities utilize high speed diesel generators (totally roughly 1.2 MW in Yei, and 880 kW in Kapoeta and Maridi, respectively) to generate electricity, and distribute power over a 11 kV primary network, stepped down using various single phase distribution transformers to both residential, commercial and institution clients.

#### **Background and Procurement Program**

The utilities have entered into a joint procurement agreement in order to fulfill short and long term material needs. These needs include both service materials (from electric meters to PVC conduit) to line construction materials (conductor, bolts, poles, crossarms, transformers, etc.) to other addition equipment needed to meet the needs of their expanding consumer base.

As such, the utilities call for an expression of interest from qualified Suppliers, Firms, Consortia, and Importers with proven experience in supplying high quality electric distribution materials to be prequalified to fulfill identified immediate and long-term procurement needs.

#### **Submission Requirements**

Interested parties are requested to submit:

- Letter stating their interest in supplying the utilities with high quality electric distribution materials for usage in the Republic of South Sudan
- A listing of the materials supplied by the party, broken down by category of material (bolts, poles, conductor). This listing should contain the materials manufacturer, model number and a short product description where possible.
- Sample unit prices for materials
- Proof of valid company registration, VAT, PIN certificates and operating licenses
- Full contact details including physical address, and phone and email contact details

#### **Contact Details**

Expressions of Interests are to be submitted as a single PDF file to Mr. Robert Ellinger at [roellinger@nreca-intl.org](mailto:roellinger@nreca-intl.org) no later than midnight on 31 July 2013.

# Electrification Sustainability Program In South Sudan

## Quarterly Report, April – June 2013

### Success Story – Kapoeta Electric Company



The following pictures are of the first, electric corn / grain mill in Kapoeta South County. This three-phase account is owned by James K. Gachig a local business man from Kenya. He currently uses both fuel and electric powered units and the KAPECO staff is planning to work with the customer to measure the efficiency of each unit and provide this information to the business in the community to emphasize the efficient and economical use of electricity.

Owner James K. Gachig loads corn into his new electrical grain mill. According to KAPECO staff Mr. Gachig is one of the happiest business customers we serve. He always comes to the office to pay his bill with a smile on his face!!

